



Material Safety Data Sheet

1. Product and Company Identification

Material name CH213A
Use of the preparation Inkjet printing.
Version # 01
Revision date 04-07-2009
CAS # Mixture
Synonym(s) ColorSpan 0900344-002
Company identification Hewlett-Packard Company
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Date prepared Apr 06, 2009
MSDS number 380610

2. Hazards Identification

Acute health effects

Skin contact Contact with skin may result in irritation. Avoid contact with the skin.
Eye contact Contact with eyes may result in irritation. Avoid contact with eyes.
Inhalation Inhalation of vapor is not expected to be a primary route of exposure for this product under normal use conditions.
Ingestion Acute ingestion may result in mild gastrointestinal distress. May be harmful if swallowed.
Ethylene glycol
Harmful if swallowed. May cause kidney and liver damage. May depress the central nervous system.

Potential health effects

Routes of exposure Potential routes of overexposure to this product are skin and eye contact

3. Composition / Information on Ingredients

Component/substance	CAS number	% by weight
Ethylene glycol	107-21-1	<7
2-pentanol	6032-29-7	<3
2-Pyrrolidone	616-45-5	<3
Glycerol	56-81-5	<3
Propylene Glycol	57-55-6	<3
Diethanolamine	111-42-2	<1.5
Minor Ingredients		<2
Dyes	Proprietary	1-7
Water	7732-18-5	Balance

Composition comments This ink supply contains an aqueous ink formulation.



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4. First Aid Measures

First aid procedures

Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops or persists.
Skin contact	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Wash clothing separately before reuse.
Inhalation	In case of accident by inhalation: remove casualty to fresh air and keep at rest. If symptoms persist, get medical attention.
Ingestion	Rinse mouth out with water. Give several glasses of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. If symptoms persist, get medical attention.

5. Fire Fighting Measures

Flash point and method	Not flammable
Hazardous combustion products	Decomposition of this product may yield oxides of sulfur and nitrogen.
Flammable properties	The product is not flammable.
Extinguishing media	
Suitable extinguishing media	Use any media suitable for the surrounding fires.
Unusual fire and explosion hazard	The product is not flammable.
Protection of firefighters	
Protective equipment and precautions for firefighters	Wear suitable protective equipment.

6. Accidental Release Measures

Personal precautions	Avoid contact with skin. Do not touch or walk through spilled material. Use personal protective equipment to minimize exposure to skin and eye.
Environmental precautions	Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean up in accordance with all applicable regulations. Clean-up methods - small spillage; Flush area with flooding quantities of water.

7. Handling and Storage

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product. Use personal protective equipment as required. Use only with adequate ventilation. When using, do not eat, drink or smoke.
Storage	Keep tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Do not handle or store near an open flame, heat or other sources of ignition. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
Diethanolamine (111-42-2)	TWA	2 mg/m ³	
Ethylene glycol (107-21-1)	TWA	100 mg/m ³	Aerosol.
Glycerol (56-81-5)	TWA	10 mg/m ³	Mist.



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U.S. - OSHA

Components

Components	Type	Value	Form
2-pentanol (6032-29-7)	PEL	100 ppm	
		360 mg/m3	
	STEL	125 ppm	
		450 mg/m3	
	TWA	360 mg/m3	
Diethanolamine (111-42-2)		100 ppm	
	TWA	3 ppm	
		15 mg/m3	
Ethylene glycol (107-21-1)	Ceiling	50 ppm	
		125 mg/m3	
Glycerol (56-81-5)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
	TWA	10 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.

Personal protective equipment

General

Eye wash fountain and emergency showers are recommended.

Eye / face protection

Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection

Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves. If splashes are likely to occur, wear: Latex gloves. Rubber apron.

Respiratory protection

Provide adequate ventilation.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.
When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
Launder contaminated clothing before reuse.

9. Physical & Chemical Properties

Color	Medium Cyan
Odor threshold	Not available.
Physical state	Liquid.
Form	Aqueous solution.
pH	7 - 8
Melting point	< 32 °F (< 0 °C)
Freezing point	Not available.
Boiling point	> 212 °F (> 100 °C)
Flash point	Not flammable
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Relative density	1.03 g/cm ³
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.



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Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	126.2 g/L

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal storage conditions.
Conditions to avoid	Avoid high temperatures.
Incompatible materials	Strong oxidizing agents.

11. Toxicological Information

Sensitization

US ACGIH Threshold Limit Values: Skin designation

Diethanolamine (111-42-2)	Can be absorbed through the skin.
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Local effects	Inhalation of vapors in high concentration may cause irritation of respiratory system.
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Carcinogenicity	None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.
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IARC Monographs on Occupational Exposures to Chemical Agents: Evidence of carcinogenicity in humans

Diethanolamine (111-42-2)	Inadequate data.
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US ACGIH Threshold Limit Values: A4 carcinogen

Ethylene glycol (107-21-1)	Group A4 Not classifiable as a human carcinogen.
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Symptoms and target organs

Target Organs (NIOSH)

2-pentanol (6032-29-7)	Central Nervous System
2-pentanol (6032-29-7)	Eyes
2-pentanol (6032-29-7)	Respiratory system
2-pentanol (6032-29-7)	Skin
Diethanolamine (111-42-2)	Eyes
Diethanolamine (111-42-2)	Respiratory system
Diethanolamine (111-42-2)	Skin
Ethylene glycol (107-21-1)	Central Nervous System
Ethylene glycol (107-21-1)	Eyes
Ethylene glycol (107-21-1)	Respiratory system
Ethylene glycol (107-21-1)	Skin
Glycerol (56-81-5)	Eyes
Glycerol (56-81-5)	Kidneys
Glycerol (56-81-5)	Respiratory system
Glycerol (56-81-5)	Skin

12. Ecological Information

Ecotoxicity	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Dispose of in compliance with federal, state, and local regulations. Do not allow this material to drain into sewers/water supplies.
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14. Transport Information

IATA

Not regulated as dangerous goods.

General	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.
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15. Regulatory Information

US federal regulations

US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Diethanolamine (111-42-2)	1.0 %
Ethylene glycol (107-21-1)	1.0 %

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical	No
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State regulations

US - New Jersey Community RTK (EHS Survey): Listed substance

Diethanolamine (111-42-2)	Substance no. 0686
Ethylene glycol (107-21-1)	Substance no. 0878

US - New Jersey Community RTK (EHS Survey): Reportable threshold

Diethanolamine (111-42-2)	500 LBS
Ethylene glycol (107-21-1)	500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

2-pentanol (6032-29-7)	Listed.
2-Pyrrolidone (616-45-5)	Listed.
Diethanolamine (111-42-2)	Listed.
Ethylene glycol (107-21-1)	Listed.
Glycerol (56-81-5)	Listed.
Propylene Glycol (57-55-6)	Listed.

16. Other Information

HMIS® ratings

Health: 1
Flammability: 0
Physical hazard: 0
Personal protection: B

NFPA ratings

Health: 1
Flammability: 0
Instability: 0

Issue date

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Revision

1

Replaces sheet dated

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Disclaimer

This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.



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Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds

Manufacturer information

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